

MEDIA ADVISORY

USDA Forest Service

Santa Fe National Forest



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NEW MEXICO'S FIRST WOOD CHIP-FIRED BIOMASS HEATING SYSTEM

-Ribbon Cutting Ceremony-

Date: Tuesday, March 29, 2005, 8:30 a.m.

Location: Coronado High School Gymnasium, Gallina, NM

Directions: **From Abiquiu Dam:** take NM96 for approximately 30 miles to Gallina;

From Cuba: take NM96 to Gallina about 20 miles.

Fact Sheet - Attached

Ribbon Cutting Ceremony Agenda - Attached

Photo ops

JEMEZ MOUNTAIN SCHOOLS—FUELS FOR SCHOOLS PROJECT

Gallina, New Mexico

Fact Sheet

Jemez Mountain Schools Project began as an Economic Action Program--National Fire Plan grant to the Jemez Mountain School District from the USDA Forest Service in 2001. This Biomass for Heat and Energy project is the first of its kind in the Southwest and utilizes wood chips obtained from forest thinning projects as the principal fuel source for a public facility.

Since inception the partnership and funding commitments grew and solidified. Direct contributions now total \$1,803,000 and embrace the following contributing partners:

Jemez Mountain School District
New Mexico Energy, Minerals and Natural Resources Department,
Energy Conservation and Management Division
Energy Controls Incorporated
La Jicarita Enterprise Community
Hurd Brothers Logging
Cordova Logging
USDA Forest Service, Santa Fe National Forest, Coyote Ranger District
USDA Forest Service, Carson National Forest

Project Objectives

- Serve as a biomass-to-renewable energy model that can showcase the use of forest thinnings in an energy project;
- Provide a case-study demonstration that can be replicated at other state and federal facilities;
- Reduce energy costs at public facilities;
- Advance State and Federal goals regarding renewable energy, forest health and tax dollar savings;
- Encourage collaboration among federal, state and local governments and the private sector;
- Reduce the wildfire risk to communities and improve forest health;
- Create jobs in rural communities.

Partners – Their Role and Contribution

Jemez Mountain School District received a \$450,000 Economic Action Program National Fire Plan grant in 2001 from the USDA Forest Service to retrofit the existing propane heating system and utilize wood chips as its primary heating fuel supply. The school district has contributed as its share \$183,000 in cash, a building worth \$100,000 plus \$75,000 in project design and engineering towards the completion of the project. Jemez Mountain School District contact is Superintendent Robert Archuleta (505) 638-5419

New Mexico Energy, Minerals and Natural Resources Department, Energy Conservation and Management Division worked with the New Mexico State Legislature in Fiscal year 2003 to appropriate \$450,000 for the project. The Energy Conservation and Management Division also worked with the Jemez Mountain School to secure the assistance of the performance contractor. Energy Conservation and Management Division contact is Harold Trujillo, Bureau Chief Energy Technology, (505) 476-3318.

Energy Controls Incorporated (ECI) is the performance contractor for the Jemez Mountain School District. Energy Controls Inc. performed the energy audit and final design necessary to size the furnace and boiler system. ECI also provided a variety of energy savings modifications and upgrades to improve efficiency of the entire heating system of the Jemez Mountain School. All total ECI provided \$542,000 in financial assistance. This amount will be repaid from cost savings generated by the project over a 10-year period. ECI will also provide monitoring and technical assistance for operation of the system. ECI contact is Pat Gibson (505) 890-2888.

La Jicarita Enterprise Community located in Mora, NM is contributing \$63,000. They are providing the fuel supply and storage trailers to the Jemez Mountain School. In exchange the Jemez Mountain School District and Energy Controls Incorporated are providing technical assistance and project design assistance toward the retrofitting of the Mora High School with a similar system. La Jicarita Enterprise Community contact is Ben Sanchez, Director (505) 387-2298.

Hurd Brothers Logging, a local small business in Chama, New Mexico collaborated with the Jemez Mountain School District and received an Economic Action Program National Fire Plan grant in 2001 from the USDA Forest Service for the procurement of a wood chipper. Under the grant Hurd Brothers Logging will provide chips at cost to the Jemez Mountain School Retrofit Pilot Project for a two (2) year period. Estimated cost of this contribution is \$15,000. Contact is Andrew Hurd, (505) 756-2125.

Cordova Logging, a developing small business located in Gallina, New Mexico has been collaborating with Hurd Brothers Logging on the utilization of their chipper and transportation chips. Cordova Logging will be working with the Coyote Ranger District, Santa Fe National Forest and Jemez Mountain Schools on future opportunities for providing long term fuel supply for the Jemez Mountain School. Contact is Billy Cordova, (505) 638-5481.

USDA Forest Service, Santa Fe National Forest provided a \$450,000 Economic Action National Fire Plan grant for the project and has ensured a steady supply of fuel available from national forest system land. There are approximately 10,000 acres within the ***Coyote Ranger District*** and within 10 miles of the school ready for thinning. These acreages have received the appropriate environmental reviews and have been approved for treatment. Santa Fe National Forest contact is Rural Community Assistance Coordinator, Reuben Montes, (505) 438-7892 and Coyote District Ranger, Francisco Sanchez, (505) 638-5526

USDA Forest Service, Carson National Forest under the Economic Action Program (EAP) of the National Fire plan granted Hurd Brothers Logging \$180,600 for the purchase of equipment to expand the capacity of their business. Under the terms of the grant agreement, the chipper purchased will be used in part to support the Jemez Mountain Schools with fuel at Hurd Brothers' cost for one-to-two years. Carson National Forest contact is Ignacio Peralta, Rural Community Assistance Coordinator at (505) 758-6344.

Projected Fuel Consumption and Energy Cost Savings

The Gallina School was using LP Gas as its principal fuel source for heating. Rising Liquid Petroleum Gas (LPG) prices over the last few years, coupled with energy inefficiencies of the buildings, led to a significant economic drain on Jemez Mountain School District. The Gallina School presently consumes approximately 66,000 gallons of LPG at cost of \$55,400 per year (2003 costs) and spends about \$51,700 for 490,000 kwh of electricity every year. This project will save approximately \$41,000 in LP Gas, \$10,000 in electricity and \$3,000 from operations and maintenance each year.

The Furnace System Efficiency and Emissions

The furnace which has been installed in the Gallina School was provided by Advanced Recycling Equipment and is rated at 200 HP. It has an automatic fuel feed based on temperature demands controlled at various facility locations and an automatic De-Ash feature which significantly simplifies maintenance. It is estimated that 400 tons of wood chips (forest thinnings) will be utilized during a normal year. [A rough conversion of 400 tons would equal 270 cords (Ponderosa pine) or 30 log trucks full.]

Approximately 75% of the ash will be captured through the Auto De-Ash system and approximately 25% will be captured through the cyclone dust collection system. The combustion unit and associated system has been tested and certified to meet EPA emission standards. For all practical purposes the system is smokeless.

Jobs in the Community

The project may generate forest thinning-type jobs in the community when thinning begins. In the future, the Jemez Mountain School District will look to local community wood products producers to provide the small diameter material (fuel) from the surrounding Coyote Ranger District of the Santa Fe National Forest.

Jemez Mountain Schools Biomass Heating System

Coronado High School Gymnasium, Gallina, NM
March 29, 2005

Agenda